

WHAT IS CLAIMED IS:

1. A traveling system for a driving vehicle comprising a driving vehicle capable of driving with its driving unit, a driving motor incorporated in the driving vehicle, and a power supply section capable of moving together with said driving vehicle and supplying power to the motor, wherein said power supply section can freely be loaded on or off from said driving vehicle and is disconnected from said driving vehicle in a low-duty traveling mode and power is not supplied to said driving motor, and the power supply section is connected to said driving vehicle in a heavy-duty traveling mode to supply power to said driving motor.
2. The traveling system for a driving vehicle according to claim 1, wherein the kinetic energy of said driving vehicle is converted to the electric energy, and wherein said power supply section has an accumulator for accumulating therein the regenerated electric energy.
3. The traveling system for a driving vehicle according to claim 1, wherein said driving motor is partially shared by said driving unit.
4. The traveling system for a driving vehicle according to claim 3, wherein said driving vehicle has a driving unit comprising a generating engine, a generator driven by the generating engine, and a driving motor driven by the power generated by the generator.
5. The traveling system for a driving motor according to claim 1, wherein said driving motor is provided independently from said driving unit and especially for running in the heavy-duty traveling mode.
6. The traveling system for a driving vehicle according to claim 5, wherein said driving vehicle comprises a driving unit comprising a driving engine and a transmission connected thereto, and further has a driving motor provided independently from the driving unit.
7. The traveling system for a driving vehicle according to claim 1, wherein said power supply section is configured as a power supply vehicle linked to said driving

vehicle, connector sections mutually connectable to each other are provided in the power supply vehicle and said driving vehicle.

8. The traveling system for a driving vehicle according to claim 7, wherein said power supply vehicle can drive by itself.

5 9. The traveling system for a driving vehicle according to claim 8, wherein said power supply vehicle comprises a generating engine, a generator driven by the driving engine, and a driving motor driven by the power generated by the generator.

10 10. The traveling system for a driving vehicle according to claim 8, wherein said power supply vehicle comprises a driving engine and a transmission connected thereto, and also has an accumulator capable of accumulating therein and supplying power supplied from outside to said driving vehicle.

11. The traveling system for a driving vehicle according to claim 8, wherein said power supply vehicle comprises a generating engine, a generator driven by the generating engine, and a driving motor driven by the power generated by the generator, and also has
15 an accumulator capable of accumulating therein the power from the generating engine and/or the power supplied from the outside and supplying the accumulated power to said driving vehicle.